

**DELAWARE ELECTRIC
VEHICLE (EV) INFRASTRUCTURE
PLAN MEETING #2
September 14, 2022**

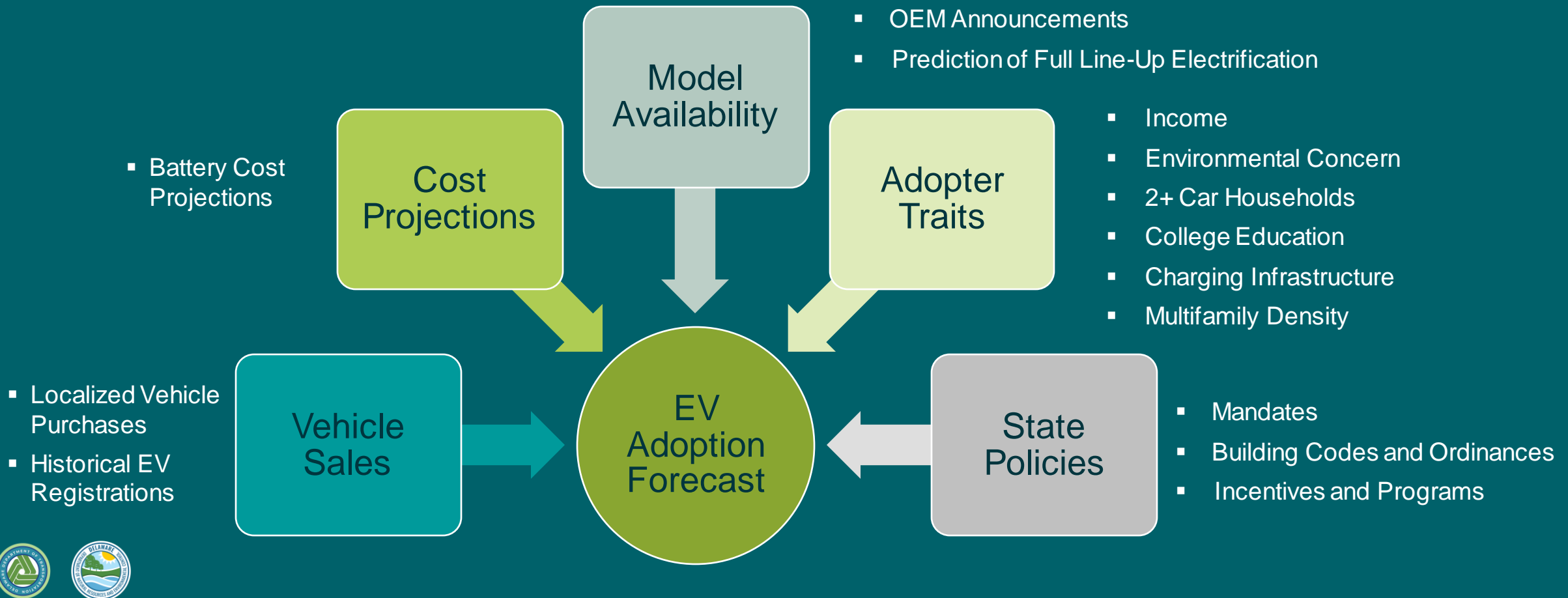
Agenda

- EV Adoption Methodology and Forecast
- Discussion Period
- EV Siting Methodology and Prioritization Exercise
- Discussion Period
- Next Steps



EV Adoption Analysis

Utilizes localized data and technology trends to estimate EV adoption rate in the state.



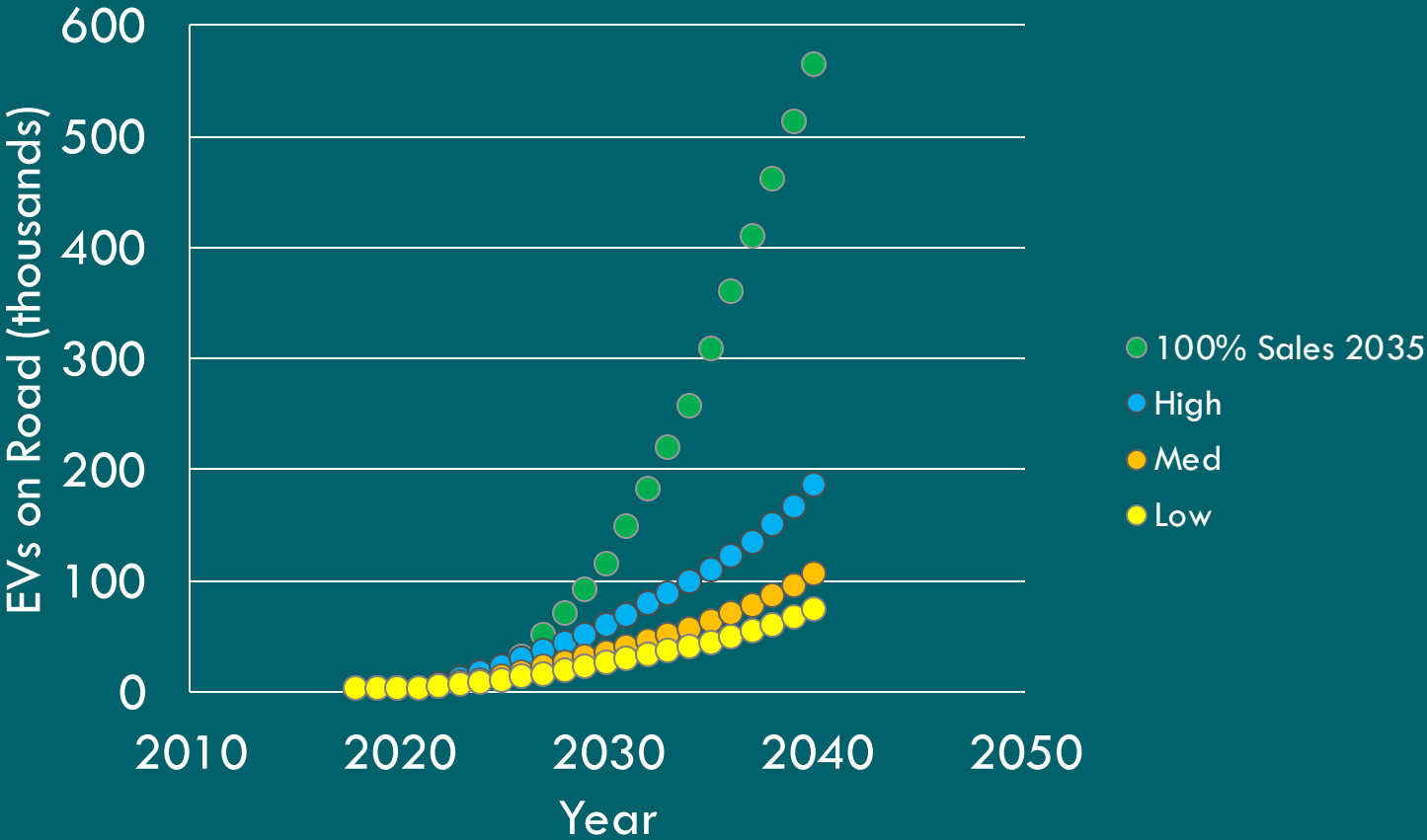
EV Adoption Analysis

Three different adoption scenarios were analyzed to consider the potential impact of EV adoption due to policies and economic environment.

Scenario	Description
Low	Reduction of EV model availability and increased upfront cost of an EV by 6% compared to the medium scenario to account for supply chain shortages.
Medium	Correlated to align with historical adoption rates. This scenario represents the baseline case.
High	Reduction in the upfront cost of an EV compared to an internal combustion engine by 14% compared to the medium scenario. This accounts for an increase in gasoline prices and further incentives, policies, or programs that reduce the cost of an EV.
100% EV Sales 2035	Adoption of California ZEV standards (100% EV sales by 2035). This assumes significant policies and programs are implemented between 2025 and 2035 to smooth the transition to electric vehicles.

EV Adoption Analysis

EV Population Forecast - Delaware



100% EV Sales 2035	2025	2030	2035
% EV Sales	6.6%	44.7%	100%
% EV Pop.	1.3%	11.7%	31.7%
High	2025	2030	2035
% EV Sales	11.8%	16.7%	20.8%
% EV Pop.	2.2%	6.1%	11.1%
Med	2025	2030	2035
% EV Sales	6.6%	9.5%	11.8%
% EV Pop.	1.3%	3.5%	6.4%
Low	2025	2030	2035
% EV Sales	4.6%	6.6%	8.2%
% EV Pop.	0.9%	2.5%	4.5%

Questions or Comments



Site Selection Methodology



```
graph LR; A[Identify Priority Areas] --> B[Determine Appropriate Charger Type]; B --> C[Validate with Stakeholder Engagement]
```

Identify
Priority Areas

Determine
Appropriate
Charger Type

Validate with
Stakeholder
Engagement

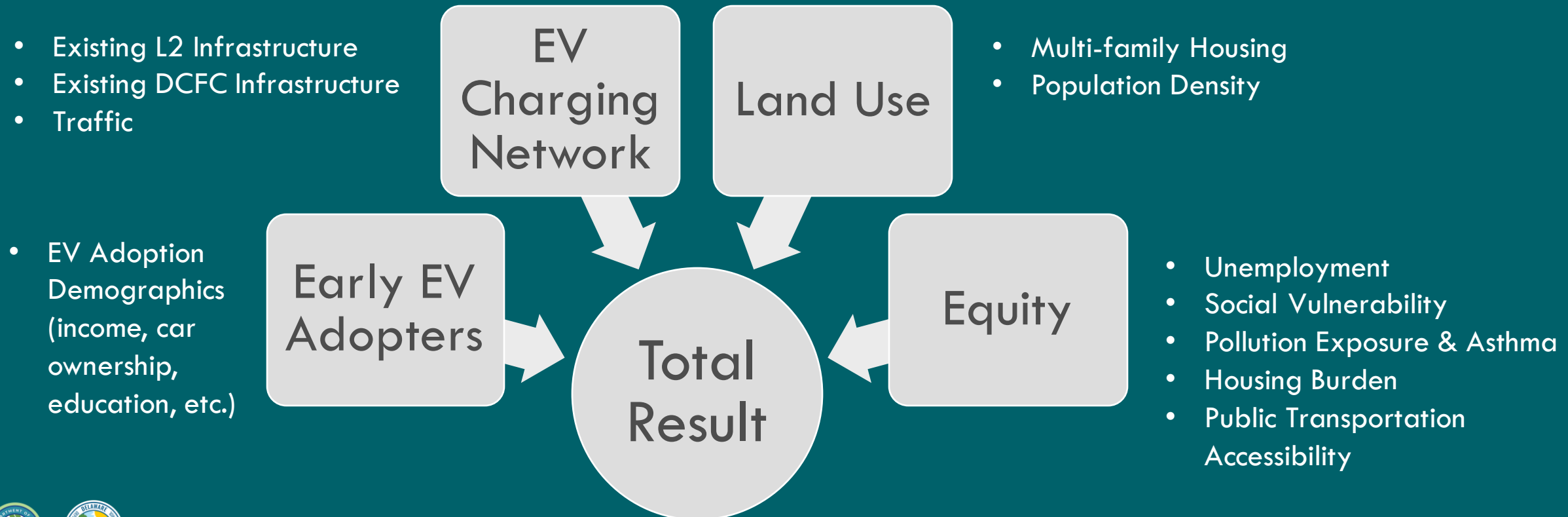
Identifying Priority Areas

- Utilize EV.Readi to determine zip codes that would be prioritized for EV charging infrastructure
- EV.Readi uses data to assess criteria grouped by four modules:
 - Early EV Adoption: Indicators associated with early EV adoption. This will determine where EV adoption is likely to occur and require an EV charging network.
 - EV Charging Network: Inequities within traditional public mobility as well as the existing EV charger network in order to identify gaps in the charging network and opportunities for EV charging to improve mobility access.
 - Land Use & Built Environment: Existing land use and opportunities where land use can be used leveraged to support EV infrastructure and increase EV adoption.
 - Equity: Socio-economic community disparities that can aid in targeted EV infrastructure investment to enhance equity among vulnerable populations.

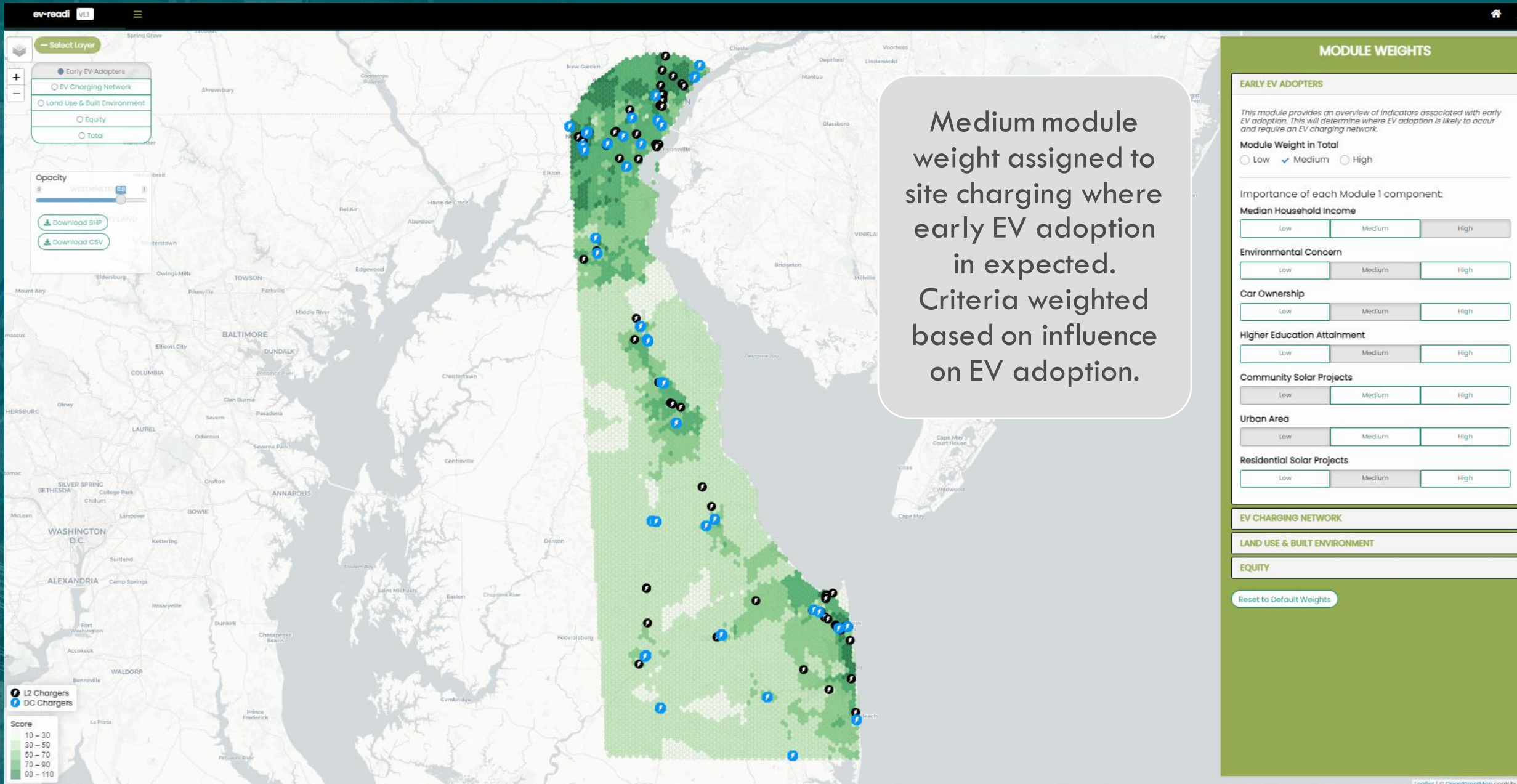


Identifying Priority Areas

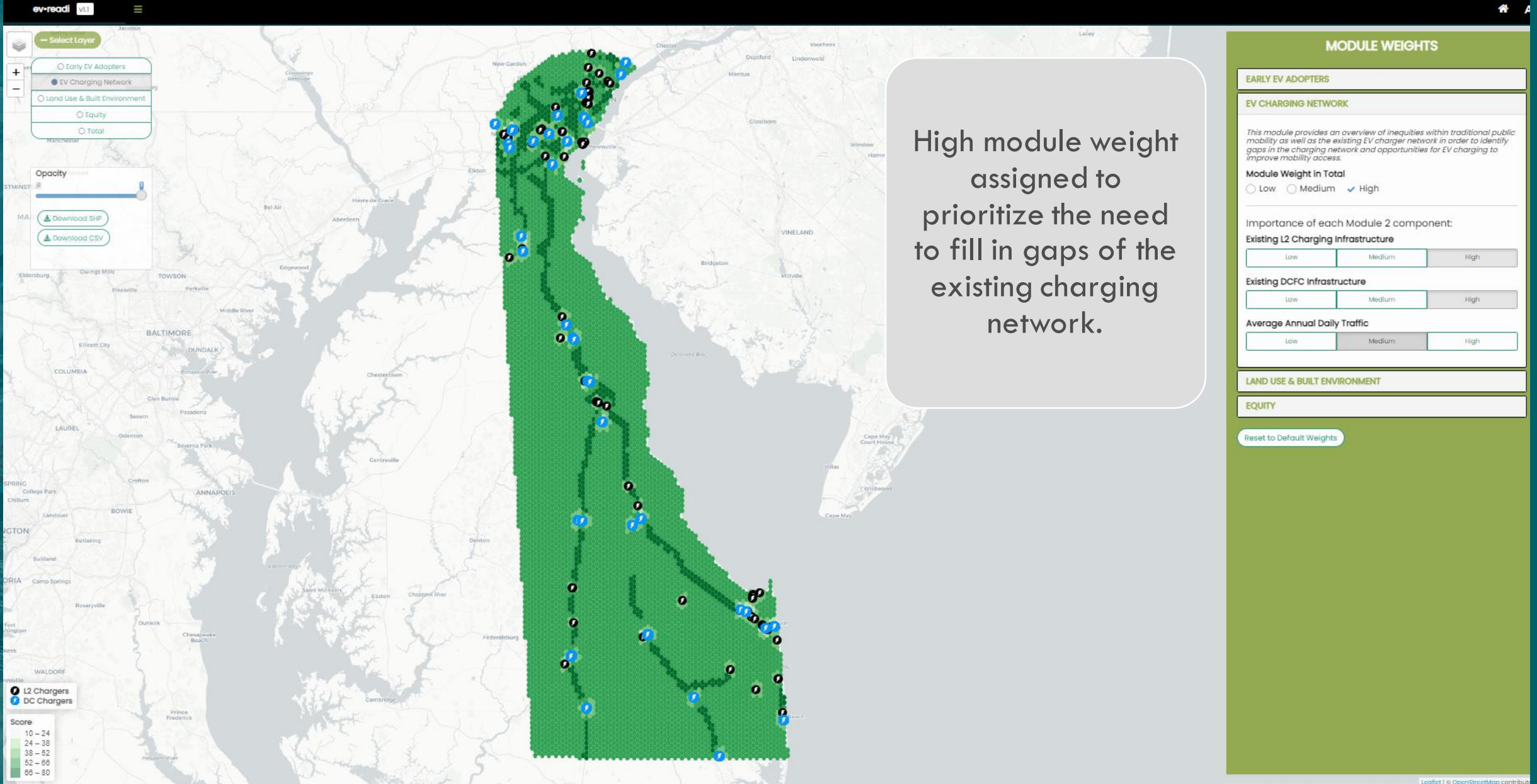
- Each criteria and module is weighted to align with stakeholder priorities.
- After weighting, all four modules are combined to create a Total Result score



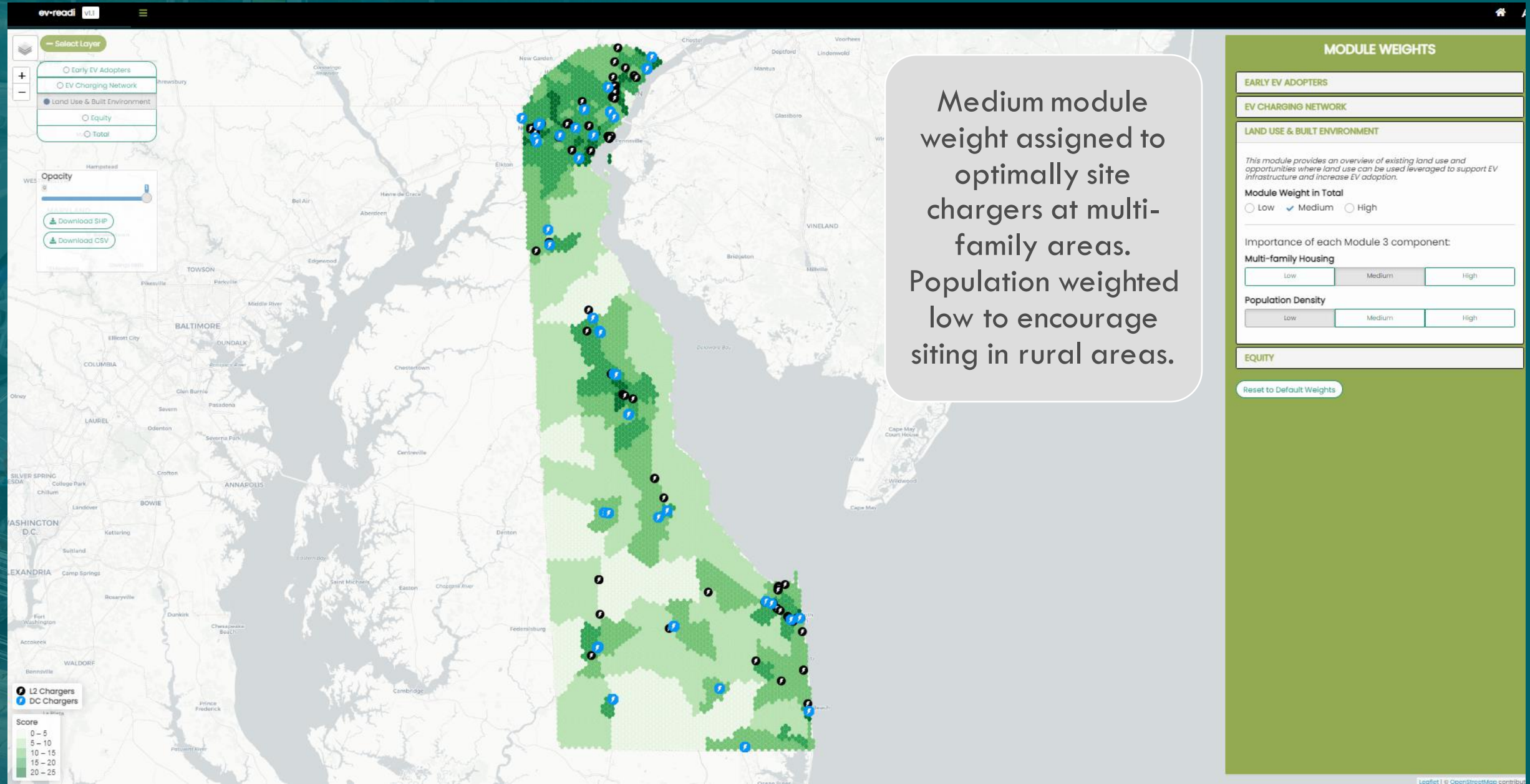
Early EV Adopters

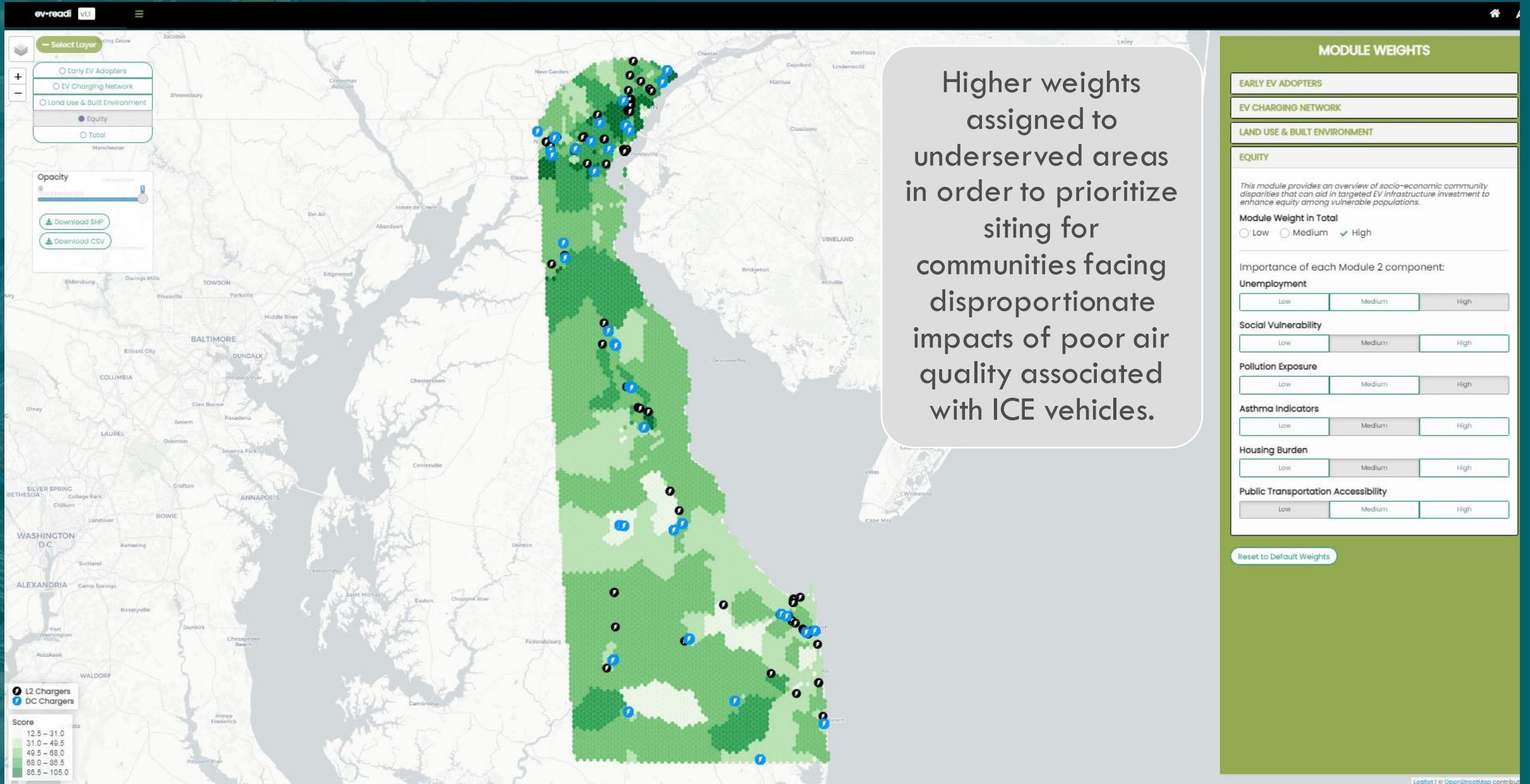


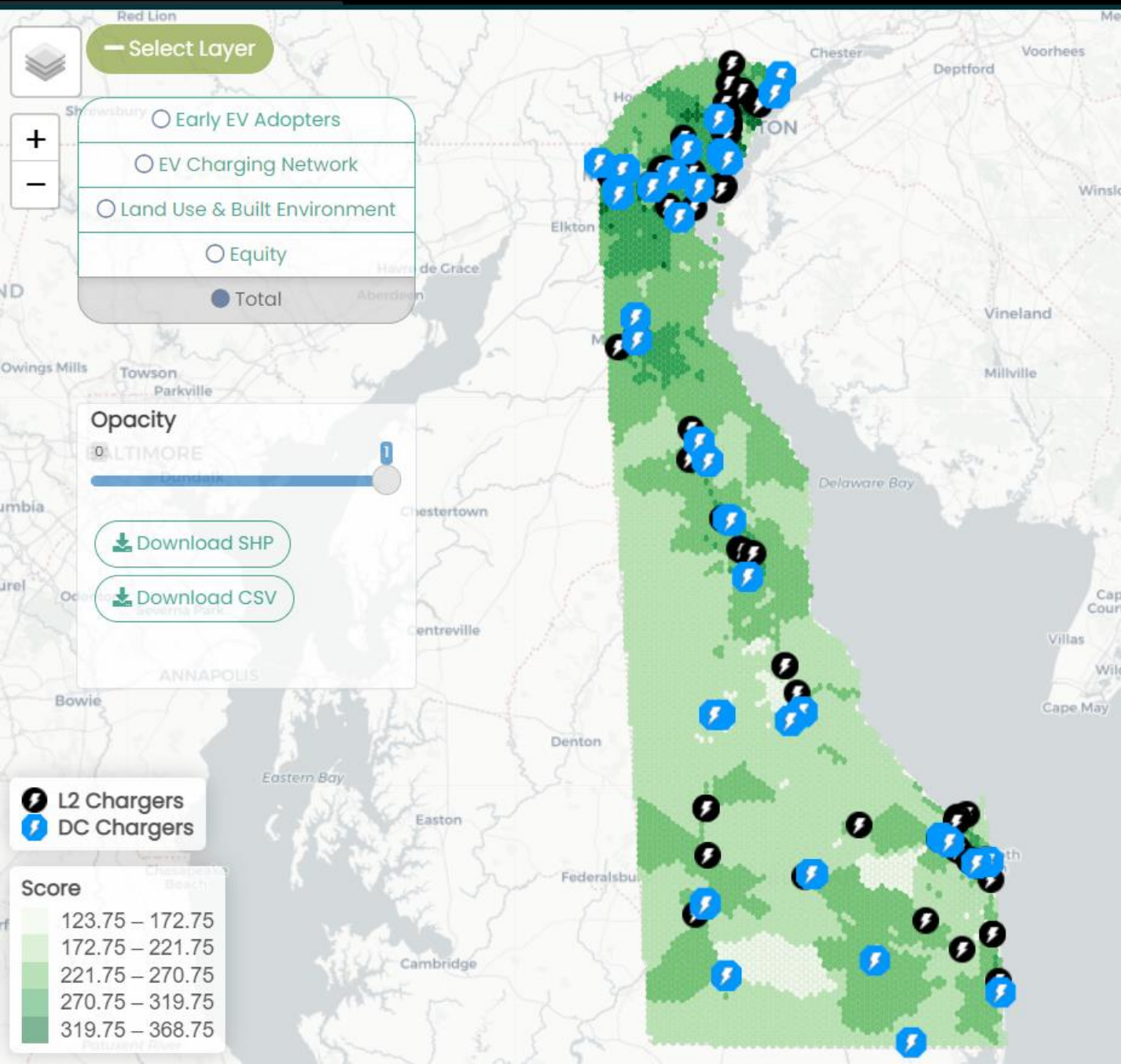
EV Charging Network

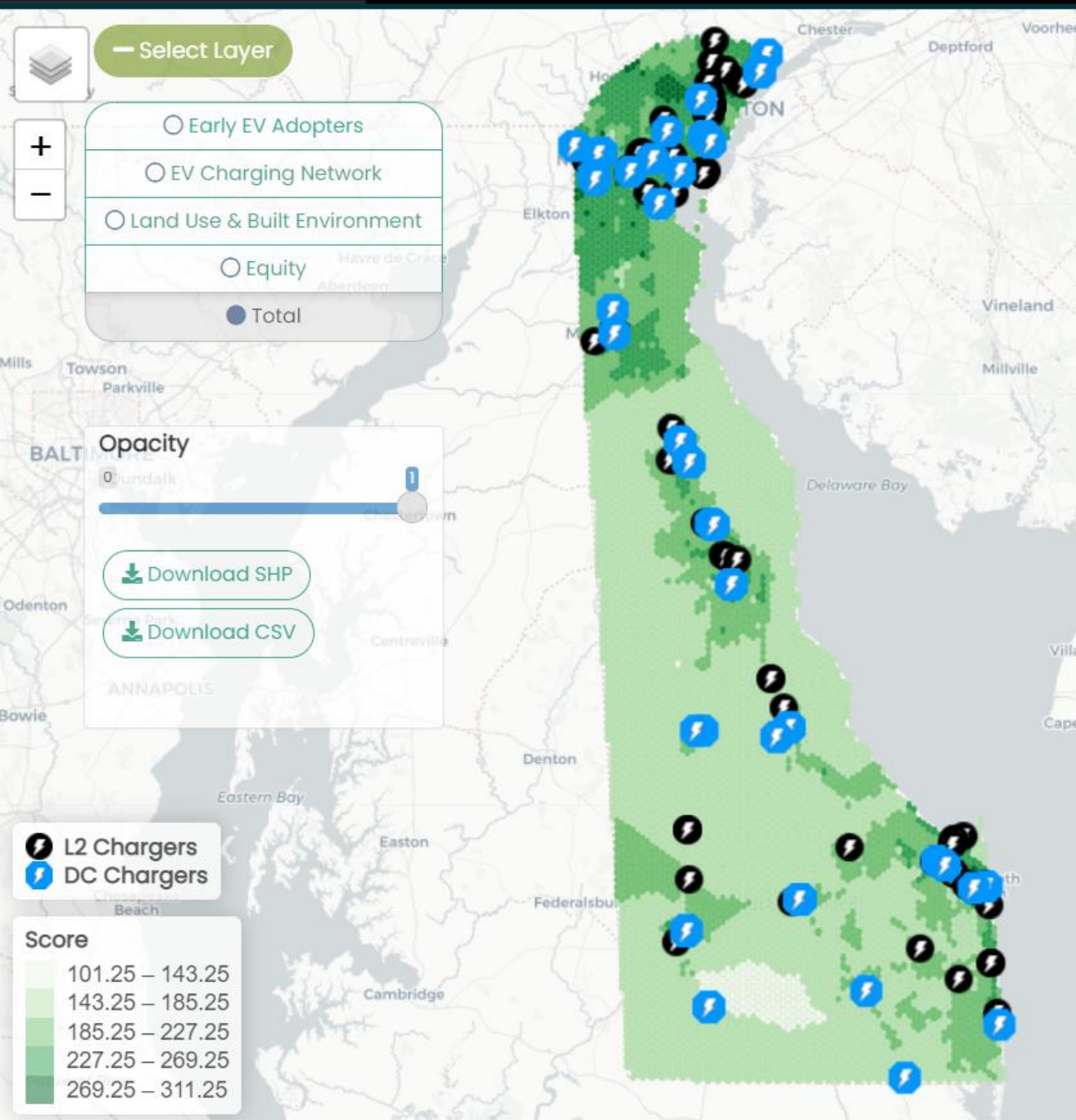


Land Use & Built Environment



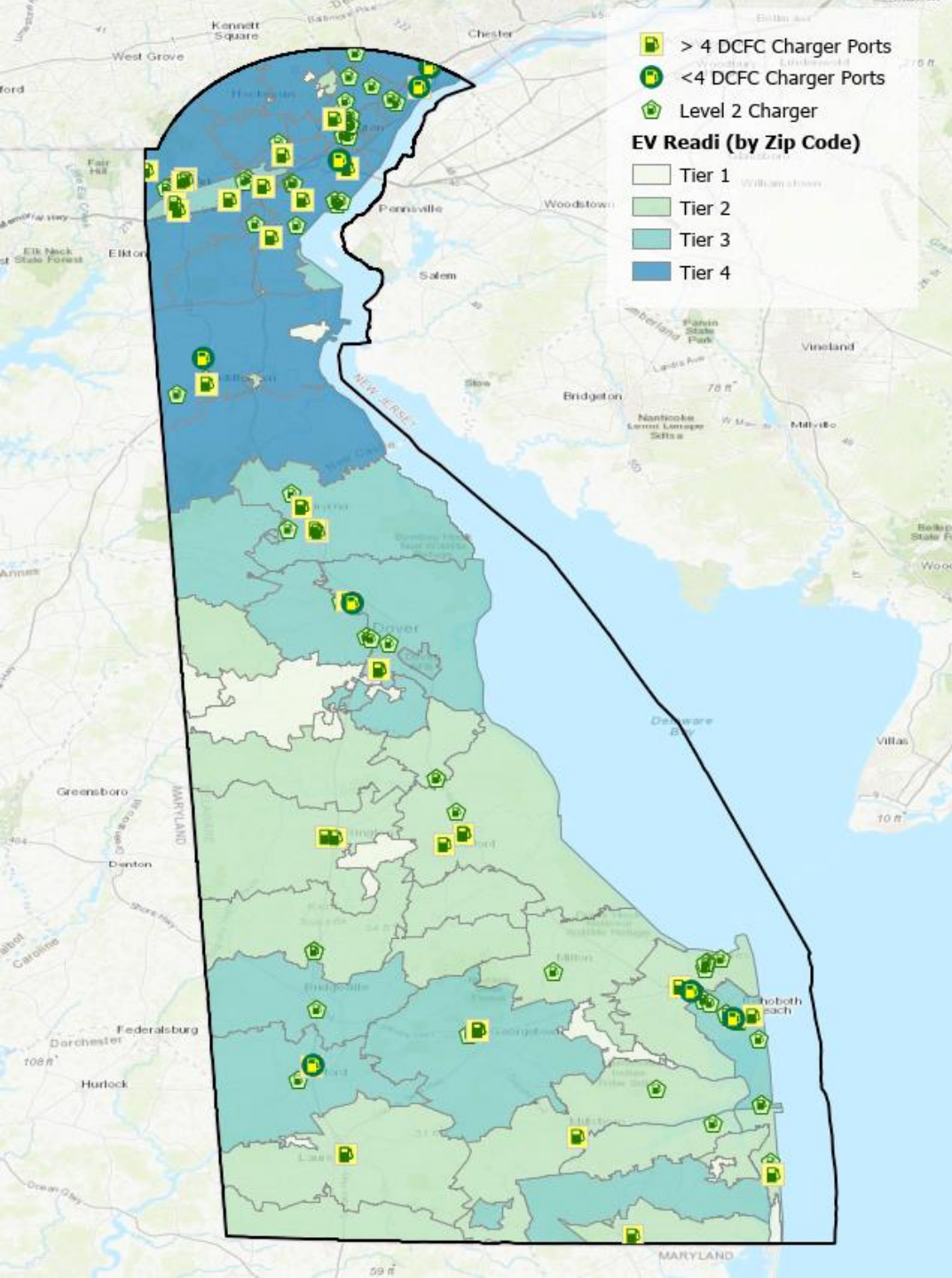






Example Result with Altered Weighting

- Results show if Early EV Adoption was high and Equity low as hypothetical.
- Demonstrates that weighting does impact results showing higher priority in the suburbs of Wilmington and less in rural/disadvantaged communities, but “hotspots” remain the same



Priority Tiers by Zip Code

Tiers developed to phase infrastructure deployment:

- Tier 4: Highest priority areas, zip codes ranked in the highest quartile
- Tier 1: Lower priority areas, zip codes ranked in the bottom quartile.

Questions or Comments



Next Steps

- Kickoff Public Workshop #1 tentatively scheduled for October 24, 2022
- Working Group Meeting #3 late fall, early winter
- Draft Statewide Plan in fall 2022

